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ABSTRACT

The influence of faculty characteristics, perceptions, and work environment on job satisfaction and identification with the institution was studied. Questionnaire responses from 9,237 faculty were evaluated, based on a 1971 survey conducted by the Stanford Project on Academic Governance. The following faculty characteristics were considered: time spent on research, number of books/articles published, educational background, academic rank, tenure status, age, and participation in governance. Colleges were categorized by type of institution and the teacher's role in institutional decision making was identified (e.g., selecting a department head, formulating admissions standards). Teacher job attitudes were determined concerning: teaching load and fairness of evaluation, working conditions, salary, the college administration, and the respondents' influence in the institution. Finally, attention was directed to the teacher's level of job satisfaction and identification with the institution (i.e, those who prefer to remain at their job and those who wish to relocate to another college). The findings are discussed, and path diagrams for six types of colleges indicate the influence of the individual and institutional factors on a general satisfaction score and institutional identification. (SW)

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COLLEGE FACULTY SATISFACTION AND INSTITUTIONAL IDENTIFICATION

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presented at

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1. INTRODUCTION

What is there in a person's individual characteristics or work environment that makes him or her prefer to continue at a job, even if a "better" position were to be offered? What role does job satisfaction play in determining this institutional identification? Are the causes or components of job satisfaction different for faculty in higher education than they are for other kinds of employees? The question of what produces job satisfaction, "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences"[1] has for many years been the object of study by a broad range of scholars and theorists. It seems to be the mysterious "black box" between the relatively concrete realities of the conditions of a job and the behavior of an individual who feels satisfied or dissatisfied.

Research in industrial and organizational psychology has shown what causes employees to be more satisfied, work better, and remain at the institution longer, and the findings fill dozens of journals and hundreds of books. Many of the studies, however, deal either with particular populations which have unique characteristics, or with general populations, and the findings may not be applicable to professional employees or to academic faculty in particular. College and university faculty have not been the subject of much research until recently; Caplow and McGee (1958) commented that "...the methods of social research have been applied by university professors to every important institution except their own." Even when the subject of a study is college or university faculty, findings may not be applicable to other institutions if the study includes only one college or a small number of institutions. Because of the great differences in the various types of colleges and universities, observations which may be valid for a 2-year private college, for instance, might not be applicable to faculty at a public multiversity. A comprehensive data source for the full spectrum of institutional types is necessary in order to distinguish different conditions and relationships in the varying types of institutions.

In 1971 a major step was taken to fill this need when the Stanford Project on Academic Governance asked college and university faculty across the United States a broad range of

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[1] E. A. Locke, "The Nature and Consequences of Job Satisfaction" in M.D. Dunnette (ed.) Handbook of Industrial and Organizational Psychology Chicago: Rand-McNally, 1976, p. 1300.

questions concerning themselves and their work at their various institutions. The findings of the Project stimulated this researcher's interest in the relationship of the factors with which the present study is concerned. The Stanford Project found, for instance, that trust and satisfaction among an institution's faculty are related to objective working conditions, pressure on the institution from outside groups, and the degree to which they participated in policy making for their institutions. Preliminary findings from a recent major, but somewhat smaller, study by the Institute of Higher Education at Columbia University's Teachers College deal with at least some similar themes in its study of the relationships between college finances and faculty members' assessment of the institutions during the period 1970-1980. The Institute of Higher Education attributes the decline in faculty morale during the period to a decline in participation in institutional governance by the faculty. Institutional identification, however, has not been a major focus for either of these projects. The present study uses the data base of the Stanford Project on Academic Governance and focuses on hitherto unexamined relationships of various factors to institutional identification. It will attempt to identify causal relationships between a number of variables and institutional identification.

2. REVIEW OF THE LITERATURE

Rank, age, and longevity in a job are generally the three factors most closely related to a person's commitment to an organization (Salancik, 1979). The three characteristics are also closely related to each other. Increased rank brings increased privileges and salary, as well as increased responsibility, and the Stanford Project on Academic Governance found, to no one's surprise, that the better the faculty member's status was, the less he or she wanted to leave. The Stanford Project also found that the length of time a person has been employed by a college or university is also related to commitment to the organization. In a similar manner, age is related to commitment to an organization. Older individuals tend to become less flexible in adapting to a new work environment, and in many cases, their marketability is reduced because of high salary expectations and specialization in professional interests.

Studies of various populations have consistently shown that withdrawal behavior such as absenteeism and employee turnover are negatively related to job satisfaction. Brayfield and Crockett (1955) in reviewing numerous studies of particular populations found a strong relationship between employee dissatisfaction and withdrawal behavior, but pointed out that methodological weaknesses in many of the studies

may have exaggerated the strength of the relationship. Hertzberg et al. (1957) found similar results. Vroom (1964) reviewed the literature, and his findings reinforced earlier conclusions linking job dissatisfaction to accidents, grievance rates, turnover, and absenteeism, though he found the negative relationship between job satisfaction and absenteeism to be less consistent than the individual studies suggested. Vroom used his findings in constructing his expectancy /instrumentality theory of motivation.

Despite the consistency of many of the findings, the correlations between satisfaction and behavior have not been high. Several reasons have been suggested. Motley (1979) suggested that the low correlation may be the result of a long chain of intervening steps between the experience of satisfaction or dissatisfaction and the resultant quitting or staying. Choices the individual makes at any of these stages might be strongly influenced by outside factors. Lack of alternatives (or unfavorable evaluation of them), for example, would result in a dissatisfied person's remaining in a job. Brookes' recent study (1980) focused on this phenomenon of "stuckness" in community college faculty. Schuh (1967) found evidence of non-work factors affecting the quit/stay decision in his work with vocational interest inventories and scaled biographical information blanks.

Gouldner (1958) suggested in his theory of cosmopolitans and locals that professional employees tend to have an allegiance to their professions which might lessen the allegiance they have to their employers. This theory was supported in the Stanford Project on Academic Governance (Baldridge, et al., 1978) by the finding that faculty at more prestigious institutions and those who had earned the highest academic degrees showed a lower level of institutional identification in their responses. These individuals were considered to be "more professional" than faculty at less elite institutions. Baldridge found that satisfaction (which in that study consisted of a composite score of the responses to only four questions) was actually less closely related to institutional identification than a cluster of characteristics related to the cosmopolitan status of the individual. The Stanford Project thus added another caveat to the linking of satisfaction to a preference for remaining at the institution.

Gouldner's theory complicates the application of Salancik's findings (1979) that participation in governance of an organization increases a person's sense of ownership in (and therefore identification with) an organization. Community college faculty, found by the Stanford Project to have very low involvement of faculty in institutional decision making, and relatively low levels of satisfaction, have quite high levels of identification with their colleges. The more elite

institutions, and particularly the elite private liberal arts colleges, have very high levels of satisfaction and faculty participation in governance, but relatively low levels of institutional identification. A more extensive examination of these relationships is the purpose of the present research.

Recent longitudinal studies have shown that faculty satisfaction has been declining in recent years, though different population bases and different research approaches make comparison difficult. The Institute of Higher Education at Columbia University's Teachers College has found a decline in faculty morale between 1970 and 1980, which it attributed to the decline in faculty members' participation in planning and governance of their institutions. The decline in participation resulted in reduced commitment to the purposes of their colleges and in reduced support of their administrations. Morale was found to be unrelated to changes in college income or average faculty salary. The decline in the level of participation was quite steep: according to Magarrel's report of the research (1982), 64% of the faculty members felt that their institution's governance involved shared authority between administrators and faculty in 1970; in 1980, only 44% shared this opinion. Willie and Stecklein's study of higher education faculty in Minnesota (1982) found a decline in satisfaction with college teaching as a career, using data from related studies in 1956, 1968, and 1980. Major sources of satisfaction varied during that period. The opportunity to work with college-age students was most frequently cited as a source of satisfaction in all three surveys, with three out of ten responses citing it. Colleagues, intellectual stimulation, and the opportunity to participate in student development were also significant sources of satisfaction in the earlier two surveys. Working conditions became the second greatest source of satisfaction (with regard to freedom of faculty to plan their own time) in the 1980 survey, but also the greatest source of dissatisfaction (along with salary and administration) when aspects such as the number of meetings were considered. These findings of the Institute of Higher Education and of Willie and Stecklein should be taken into account in applying the findings of the present study.

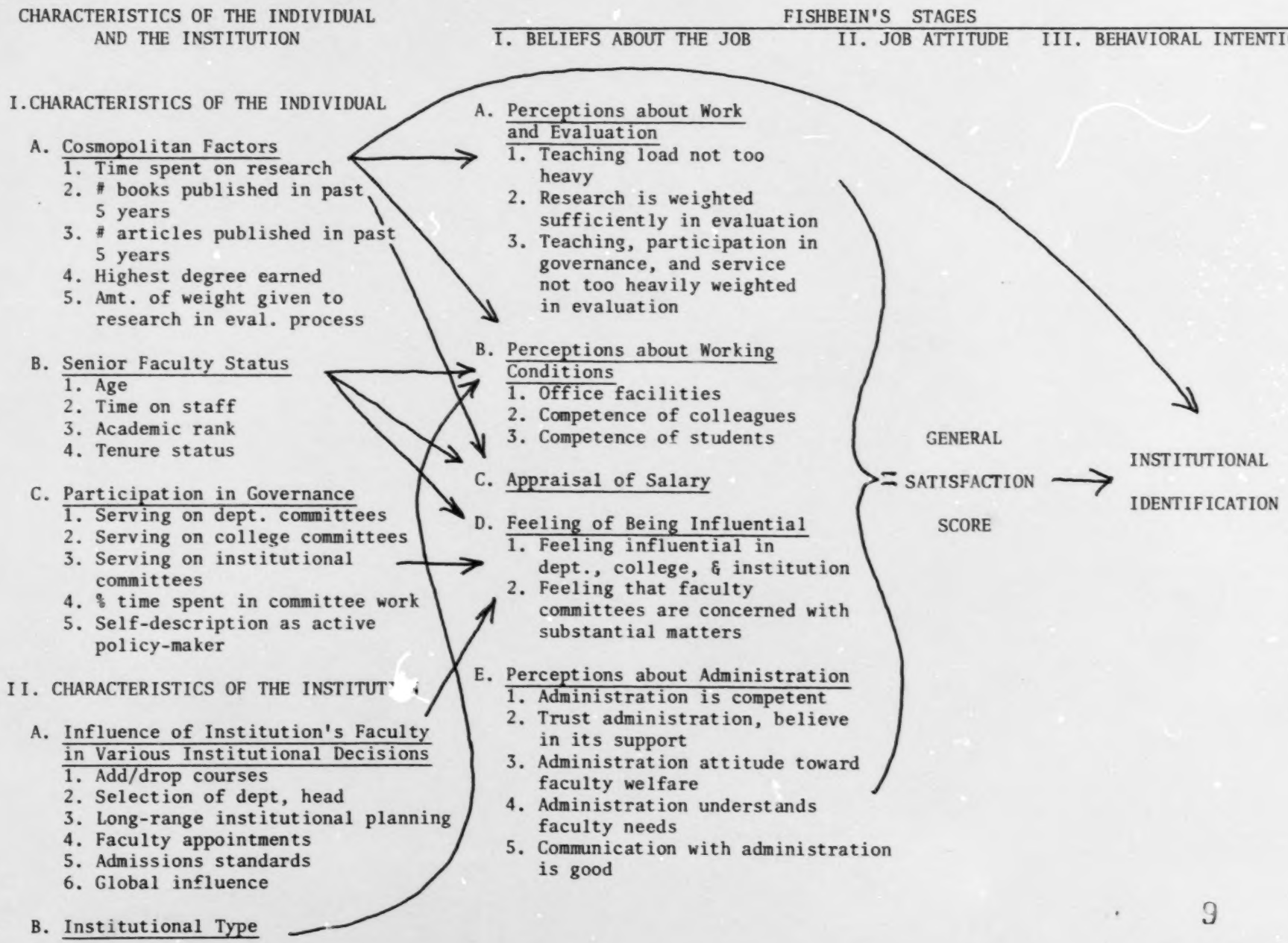
3. THE DATA SOURCE

The Stanford Project on Academic Governance, directed by J. Victor Baldridge, carried out its survey in 1971 under a grant from the United States Office of Education. Its purpose was to study institutional decision making, policies, and governance in higher education, and the role of faculty and administrators in that process. The data bank created by the Stanford Project which has been used in the present study was derived from the faculty responses to a 160-item questionnaire used in the 1971 survey. This questionnaire was sent to 17,296 faculty members at 249 institutions. 9,237 of these questionnaires were returned appropriately filled out, resulting in a usable response rate of 53.41 percent. The colleges and universities were selected so as to represent the full range of higher educational institutions, excluding only the federally supported institutions (such as West Point and other federal military academies), schools without a freshman class, and schools which did not offer at least an Associate of Arts degree. Because of the large number of institutions offering only two-year degrees, those schools were undersampled by 50% in order to get a larger sample of the other types of institutions. Data from the two-year degree schools were then given a weight of two in order that the population would represent the proportions of the institutions of higher education nationwide. The response rate from the various institutions ranged from 18 to 100% in the institutions retained for analysis; seven schools were eliminated because of insufficient response. The result was a weighted sample of 300 schools.

Additional weighting of the responses was carried out in order to have the responses from a given institution multiplied by a figure which would allow it to represent the full population of that institution. The final weighted population was 58,086. The number of faculty chosen from each institution to be sent questionnaires was based on the number of faculty in the institution. In institutions with fewer than 50 faculty, all faculty members received questionnaires. The number of faculty in larger institutions who received questionnaires was scaled from 50 (in institutions with 51 to 100 faculty) to 175 (for institutions with more than 350 faculty). In addition, five administrators from each institution were included in the sample.

When the final weighted population was compared to the numbers of institutions and individuals in various categories, it was found to be very close. It was within 1.3% of each category of institutions grouped according to the highest degree offered. It was within 2.9% of the best available breakdown of male/female breakdown in higher education faculty, and the difference would probably have been less if the figures used for comparison had excluded professinoal

STRUCTURE OF THE ANALYSIS


CHARACTERISTICS OF THE INDIVIDUAL AND THE INSTITUTION
FISHBEIN'S STAGES
I. BELIEFS ABOUT THE JOB
II. JOB ATTITUDE
III. BEHAVIORAL INTENTIONS
I. CHARACTERISTICS OF THE INDIVIDUAL
A. Cosmopolitan Factors
1. Time spent on research
2. # books published in past 5 years
3. # articles published in past 5 years
4. Highest degree earned
5. Amt. of weight given to research in eval. process
B. Senior Faculty Status
1. Age
2. Time on staff
3. Academic rank
4. Tenure status
C. Participation in Governance
1. Serving on dept. committees
2. Serving on college committees
3. Serving on institutional committees
4. % time spent in committee work
5. Self-description as active policy-maker
II. CHARACTERISTICS OF THE INSTITUTION
A. Influence of Institution's Faculty in Various Institutional Decisions
1. Add/drop courses
2. Selection of dept, head
3. Long-range institutional planning
4. Faculty appointments
5. Admissions standards
6. Global influence
B. Institutional Type
A. Perceptions about Work and Evaluation
1. Teaching load not too heavy
2. Research is weighted sufficiently in evaluation
3. Teaching, participation in governance, and service not too heavily weighted in evaluation
B. Perceptions about Working Conditions
1. Office facilities
2. Competence of colleagues
3. Competence of students
C. Appraisal of Salary
D. Feeling of Being Influential
1. Feeling influential in dept., college, & institution
2. Feeling that faculty committees are concerned with substantial matters
E. Perceptions about Administration
1. Administration is competent
2. Trust administration, believe in its support
3. Administration attitude toward faculty welfare
4. Administration understands faculty needs
5. Communication with administration is good
GENERAL SATISFACTION SCORE
INSTITUTIONAL IDENTIFICATION

staff, such as librarians, as the Stanford Project had done. Faculty age represented in the Stanford Project was within 5.6% in each age category, and junior/senior faculty rank status was matched within 1%.

Data processing for the present study was performed at the Instruction and Research Computer Center on the main campus of the Ohio State University, using the Statistical Package for the Social Sciences and the Independent Path Analysis Program.

4. STRUCTURE OF THE RESEARCH

Fishbein (1967) proposed a breakdown of the attitudinal stages which has been useful in structuring the analysis of the data available for this study. He subdivided the attitudinal stages which come between the objective realities of a work condition and the individual's response into three successive phases: beliefs about the job; job attitudes; and behavioral intentions. In the present study, the responses to certain questions in the Stanford Project on Academic Governance were organized into three major categories. The grouping is as follows:

1. factors describing the individual and the institution;

2. specific beliefs about the job (Fishbein's first stage). These are compiled during the data processing into a general satisfaction score, which would be categorized as Fishbein's second stage; and

3. behavioral intentions (Fishbein's third stage).

Since behavioral intentions are a major factor in predicting actual behavior, the research will thus attempt to distinguish some of the linkage between the specific details of the academic work place and the behaviors of the individuals in that work place.

The wide range of characteristics of the individual and of the institution in the first category set the stage for Fishbein's phases of attitudinal development. These characteristics are grouped in the present research into three groups describing the faculty members and two groups describing the institutions in which they were employed. The subgroups describing the individuals include:

1. Factors in the individuals' "cosmopolitan" or professional nature. This is a score representing the sum of the coded responses describing the proportion of

time spent on research, the number of articles and books published by the individual in the past five years, the highest degree earned, and the amount of weight given to research in the person's evaluation by the institution. This score will be used in examining Gouldner's (1959) theory of cosmopolitans and locals with regard to the faculty member's institutional identification.

2. Senior faculty status. Four questions in the Stanford Project on Academic Governance which were time-related were used in the present study. The sum of the coded responses to these closely related questions indicates the degree of senior faculty status. These factors are the respondent's age, length of time on staff, academic rank, and tenure status.

3. Participation in governance. The coded responses for the five questions related to the person's participation in governance activities were added to create a composite score for participation in governance. The questions asked the number of department, college, and institutional committees the person served on, the percentage of time the person spent on committee work, and how often the person considered himself or herself to be a policy maker.

The groups which describe the institutions in which the faculty members work include:

1. Institutional Type. This grouping was done by the Stanford Project on Academic Governance according to the categories established by the Carnegie Commission on Higher Education in its Classification of Institutions of Higher Education. These types, as they are coded by the Stanford Project, are in the following order: Private Multiversity, Public University, Elite Liberal Arts College, Public Comprehensive, Public College, Private Liberal Arts College, Community College, and Private Junior College.

2. The Influence of Faculty in Institutional Decision Making. One section of the questionnaire sent to faculty members included their appraisal of the influence of various campus forces in institutional decision making. The responses of the six questions related to faculty influence in decisions concerning adding or dropping a course from a department's offerings, selection of a new department head, long-range institutional planning, faculty appointments, admissions standards and policy, and global issues are added in the present study to create the Faculty Influence Score.

The preceding five groups of descriptive factors described faculty members and certain aspects of the institutions in which they worked. Each of these groups has a distinct bearing on the perceptions which the faculty member has of his or her institution and a relationship to the feelings that a faculty member has toward the job. Fishbein's first stage, "beliefs about the job", is concerned with the employee's perception of the work being done. Some examples given by Fishbein are: "This job is dull"; "This job is dirty"; and "This job provides little autonomy." Like any judgment, the opinion which a person forms toward an aspect of his or her work depends both on the nature of the work itself and on that person's frame of reference. A broad range of questions asked of the faculty members who participated in the Stanford Project on Academic Governance address the person's evaluation of the work itself, working conditions, pay, relationship to administration, and professional autonomy. The nineteen questions from the Stanford Project which fall under the Fishbein's category of beliefs about the job were grouped into five groups for analysis in the present study. These groups are: perceptions about teaching load and fairness of evaluation; perceptions about working conditions; appraisal of salary; perceptions about the administration's bias and competence; and a feeling of being an influential individual in the institution.

The responses concerning a variety of faculty member's perceptions concerning their teaching load and the fairness of their evaluation form the first group of faculty members' beliefs about their jobs. Specifically, these beliefs and perceptions include:

1. faculty members feeling that their teaching load is not too heavy;

2. faculty members feeling that their research and scholarship are sufficiently weighted in the evaluation of their work;

3. faculty members feeling that their teaching is <u>not</u> too heavily weighted in the evaluation of their work; and

4. faculty members feeling that participation in governance is <u>not</u> too heavily weighted in the evaluation of their work.

The second group of faculty members' beliefs about a job is their satisfaction with working conditions, specifically:

1. faculty members feeling that their office facilities are comfortable and efficient places in which to work;
2. faculty members feeling that their colleagues are

competent people; and
3. faculty members feeling that the typical students at their schools are academically competent.

Satisfaction with salary is the third aspect of faculty members' beliefs and perceptions about their jobs. Salary is evaluated by respondents in the Stanford Project in relation to their qualifications and experience. The question does not ask the respondent to evaluate salary on the basis of his or her performance.

The fourth group of faculty beliefs and perceptions to be considered is the reponses to questions concerning the faculty member's feeling of being influential - as an individual in the department, college, and institution - and as a member of a faculty committee which is concerned with substantial matters in institutional governance.

The fifth group of a faculty member's beliefs about his or her job to be considered includes the responses to questions concerning the person's trust in the college or university administration. These attitudes of trust toward the administration are concerned with the administration's degree of bias and efficiency. The questions used in the Stanford Project were based on a distinction made by William Gamson (1968), who used the general labels "partisan" and "authority". These terms refer to "faculty" and "adminstration" in higher education. The questions related to bias include responses concerning:

1. faculty members feeling that their administration understands the needs of academic professionals and works hard to make their institution a place where academics can work productively; and
2. faculty members feeling that their administration has a very progressive attitude about faculty welfare in terms of salary and working conditions.

Given a favorable orientation on the part of the administration, the question still remains whether the administration is competent and efficient enough to carry out its work. The questions related to competence and efficiency in the administration include:

1. faculty members feeling that the top administration of their institution is competent, able, and energetic;
2. faculty members feeling that the administration of their institution would not give in to outside pressures if that action would be unpopular with the faculty; and
3. faculty members feeling that communication between the faculty and the administration is usually open, easy, and effective.

In Fishbein's second stage, "job attitudes," an individual's satisfaction or dissatisfaction is a result of weighing many individual factors. Though the state of satisfaction is a hypothetical construct which cannot be measured directly, a person's position on the attitude continuum from dissatisfaction (minus) to satisfaction (plus) is inferred logically from people's statements of their perceptions (Fishbein's first stage) and their behavior. No such general question as "Are you satisfied with your job?" was asked of the faculty in the Stanford Project on Academic Governance. The results of a person's weighing of the various perceptions of the job which are included in Fishbein's first stage would result in a general appraisal of satisfaction. In the present study, this stage is represented by the General Satisfaction Score, which is the sum of the adjusted scores for the five groups of relevant perception questions for each person. The General Satisfaction Score in the present study has a range between 19 (indicating that the person had expressed the lowest level of satisfaction on each question) and 41 (indicating the highest level of satisfaction for each question). Creating the General Satisfaction Score in this manner is in accord with Likert and Willits' (1940) definition of job morale as "...an individual's mental attitude toward all features of his work and toward all the people with whom he works." The General Satisfaction Score is a much broader-based satisfaction score than the one used in the Stanford Project on Academic Governance, which included only perceptions of teaching load, office facilities, competence of colleagues, and competence of students. It is also quite different from the Stanford Project's faculty morale score, which includes trust (of administration), satisfaction, institutional identification, and militancy. The General Satisfaction Score used in the present study is posed as a person's likely general evaluation of his or her job.

Fishbein's final stage, "behavioral intentions", is the result of a complex individual process of evaluation and weighing of alternatives, as described by Mobley (1979). After weighing the various aspects of a job, a person expresses a preference. Is a better (or even a comparable) job elsewhere more important to the faculty member than his or her identification with the present employing institution? Whether or not the person can act on that choice, an intention is formed. In the questionnaire of the Stanford Project on Academic Governance which was the source of the data for the present study, this stage of behavioral intentions is represented by the institutional identification question:

> Your identification with the institution as related to employment possiblities elsewhere: (Check one):
> (a) My identification with this institution is very strong. I probably would not leave except under very unusual circumstances.

(b) My identification with this institution is moderate. I would probably leave for a better job.

(c) My identification with this institution is fairly weak. I would probably leave for a better job and perhaps even for a comparable job.

The wording of the question prevents those who are "stuck" in their position from being classed with those who prefer to remain in the institution. For purposes of analysis, individuals in the present study who claimed moderate identification with their institution in this question were classed with those with fairly weak identification, since the individual considers the better job to be more important than allegiance to the institution. Persons with weak to moderate identification comprised 48.9% of the total population.

5. PROCESS

The first stage in the analysis of the data from the Stanford Project on Academic Governance was a correlational study. Correlation study is used to examine the covariation of two or more variables. When the intensity or presence of one variable tends to increase or decrease with the intensity or presence of another, a degree of correlation is discerned between them. When one variable rises or falls with (or in opposition to) another, the behavior of one can be used to predict the behavior of the other. Predictability does not support hypothesized causal relationships, so path analysis was needed as a second stage of analysis. Path analysis begins with a set of assumed or hypothesized relationships among variables which are connected in a schematic representation by a set of uni-directional arrows. Each arrow points from an independent (exogenous) variable to its dependent (endogenous) variable. A statistical procedure manipulates the correlations in a given correlation matrix to calculate the direct influence along a given path between independent and dependent variable. Statistically, the resulting path coefficient, with which the arrow is marked, is a standardized partial regression coefficient. The path coefficient comprises the portion of the variation in the dependent variable for which the independent variable would be directly responsible if it were increased (or decreased) by one standard deviation while all other variables were held constant. Support for a hypothesized causal relationship is thus produced. When two variables are believed to influence each other, they are connected in the path diagram with a curved, double-headed arrow which is labeled with the correlation coefficient of the two variables, since a path coefficient would be inappropriate to express their relationship. Residual paths, which are given for each of the

endogenous variables, indicate the extent to which the measured causes in the diagram fail to account for the variation in the dependent variables.

The Pearson's correlation coefficients of the characteristics of the individual and the institution were examined with regard to their grouping. Correlations within groups were all positive, though they varied from very high to very low. Regrouping was not carried out because the basis for grouping was the conceptual relationship of the factors rather than factor analysis.

6. FINDINGS

Rapid-fire comparison of many variables and combinations of variables which are not familiar to the reader may cause some confusion in the summary of the findings which follows. The reader may wish to refer to the path diagrams and correlation matrices appended to the text in order to compare relationships within an an institutional type or to compare the strength of various relationships across institutional types.

Using the data from the entire spectrum of institutions, path analysis revealed that a significant portion of the variance in the general satisfaction score was accounted for by the total (direct plus indirect) effect of variation of participation in governance (.2908), faculty power in the institution (.2564), and senior faculty status (.3204). There was also some influence of institutional type (.0913). "Total effect" in this context indicates the portion of the total association of two variables which is not due to their common causes, to correlation among their causes, or to unanalyzed (predetermined) correlation. The influence of the cosmopolitan nature of the individual on the general satisfaction score was negligible. The sum of the measured influences on general satisfaction (.9589) was greater than the residual path for the general satisfaction score (.8448), indicating that the variables in the diagram accounted for more of the variance of the general satisfaction score than whatever causes may lie beyond the realm of the diagram.

A similar amount of variation in the institutional identification score was accounted for by the variation in its exogenous variables. The senior faculty status score, with its total effect of .3816, had the most substantial total effect, followed by the individual's general satisfaction score (.2967), the negatively-related cosmopolitan score of the individual (-.1330), and the amount of participation in governance (.1268). Power of the faculty in the institution

(.1006) had a very minor influence on institutional identification, as did the institutional type (-.0015). The present finding of the inverse relationship between cosmopolitan factors and institutional identification is in accord with the earlier findings by the Stanford Project on Academic Governance, which are believed to have been obtained by evidence of correlation only.

The findings of the present study support the findings of Salancik (1979) that rank, age, and longevity in a job are most closely related to the person's commitment to an organization, but only when those factors are totaled as a composite score. The three factors do have a moderate correlation with institutional identification when they are analyzed separately (.2232, .3851, and .4007, respectively), but their direct influence, as evaluated by path analysis, was not particularly strong. Rank had no significant direct relationship to institutional identification, and an indirect effect (through the General Satisfaction Score) of only .0188. The total effects of age and time on staff on institutional identification were .1932 and .2445 respectively. The three factors are highly correlated with each other, so it is logical to group them into a single score, but it should be remembered that with respect to college and university faculty in general, time on staff is the most influential component of the senior faculty status score when its relationship to institutional identification is considered.

The relationship of participation in institutional governance gives very little support to Salancik's (1979) findings that participation in governance of an organization increases a person's sense of ownership in (and thus identification with) an organization. There is a correlation of .2425 between these variables, when the population of the entire spectrum of institutions is considered, but the total effect of participation in governance on institutional identification is only .1268, and most of that influence is indirect.

The data is not consistently comfortable within Fishbein's schema. Institutional type, academic rank, power of faculty in the institution, tenure status, and participation in governance fit the framework well, with a heavier impact on satisfaction (Fishbein's stage 2) than on institutional identification (stage 3), but age, time on staff, and cosmopolitan factors (Fishbein's stage 1) had more effect on institutional identification than on general satisfaction. Further analysis needs to be done in these areas.

The relative influences of the various characterisitics of the individuals and the institutions in which they work varied according to the type of institution concerned. The clearest way to describe the influences is to describe their

effects factor by factor. The Private Junior College category is not included in the path correlation analysis because the number of complete questionnaires from that institutional type group was insufficient for the present analysis.

6.1 Senior Faculty Status

The Senior Faculty Status, composed of the sum of the coded responses to questions concerning the respondents' age, time on staff, academic rank, and tenure status, was consistently one of the most influential factors. With the exception of the Community College group, the Senior Faculty Status effect was greater on institutional identification than on the General Satisfaction Score. The total effect on the General Satisfaction Score ranged from .2819 (Private Liberal Arts) to .3998 (Public College), and did not have any apparent pattern. The total effect of the Senior Faculty Status score tends to dip with the General Satisfaction Score at the center of the institutional spectrum, the Public Comprehensive group (.3790). It had its greatest effect on the Elite Liberal Arts group (.4703). The exceptionally low impact of Senior Faculty Status on institutional identification in the Community College group (.2210) may be the result of differences in faculty rank distribution; 59% of the faculty of the Community College group had a rank of instructor or lecturer, while at the Private Multiversity group, only 5.8% of the faculty were in these categories. The large percentage of low-ranking faculty in the Community College group reduced the Senior Faculty Status score so that its direct effect on institutional identification was very low.

6.2 The General Satisfaction Score

Except in the Community College group, where participation in governance had a greater effect, the General Satisfaction Score had the second greatest impact on institutional identification. This general relationship is not surprising, and certainly could have been predicted without an extensive survey - yet there are some interesting kinks in the relationship. The General Satisfaction Score had some fairly strong trends across the institutional spectrum, but there was no apparent pattern in the relationship between the General Satisfaction Score and institutional identification across the spectrum of institutional types. The Private Multiversity group did have the greatest effect of satisfaction on institutional identification (.4533), and the Community College group did have the least (.2158), but

the scores of the intervening institutional types did not seem to follow any apparent pattern.

The General Satisfaction Score itself had a U-shaped curve across the institutional spectrum. Baldridge, et al. (1978) had found, using the same data source employed in the present study, that in progressing up the institutional spectrum from the Private Multiversity toward the Private Junior College group, satisfaction with working conditions, trust in the administration, and cosmopolitan characteristics of the faculty decreased, while militancy and institutional identification increased. In certain ways, however, Community College group faculty were found to be pleased with their lot. It was suggested that faculty at community colleges might compare their situations with those of high school faculty, rather than with faculty in other higher education institutions. As a result, they might report high levels of satisfaction. The General Satisfaction Score which was used in the present study was much broader-based than the one used by Baldridge, and it was recoded on a scale of 1 (least satisfied) to 9 (most satisfied). Beginning with a mean score of 6.027 for the Private Multiversity faculty, the General Satisfaction Score decreased by fairly regular intervals to 4.775 for the Public Comprehensive group, and then rose again by regular intervals to 6.070 for the Private Junior College faculty. This U-shaped pattern was supported by similar patterns in certain subgroups of factors within the General Satisfaction Score: satisfaction with the teaching load and the weighting of various activities in the personnel evaluation process; satisfaction with salary; and (to a somewhat lesser extent) individuals' feeling of being influential. One might expect faculty at the prestigious institutions to be satisfied with their work and their rewards, but there were special sources of satisfaction at the other end of the institutional spectrum as well. Community College group faculty, for example, were more likely to feel that they had more than average influence in their departments and institutions than were Private Multiversity group faculty - yet they were less likely to trust their administrations.

A better understanding of the effects of the various types of satisfaction can be gained by breaking down the General Satisfaction Score into its component parts and distinguishing the relative impact of those parts on institutional identification. Following the original assumption that the General Satisfaction Score was a cause of institutional identification, path analysis was used to analyze the amount of influence on institutional identification that could be attributed to each component of the General Satisfaction Score. As may be seen in table 1, the faculty member's favorable impression of the administration was generally the most important factor of satisfaction with regard

to its effect on institutional identification. This "favorable impression" was a score which included the coded responses showing the respondent's perception that:

1. The administration is competent, able, and energetic.

2. The administration would not give in to outside pressure against the wishes of the faculty.

3. Faculty/administration communication is good.

4. The administration understands faculty needs.

5. The administration is progressive concerning faculty welfare.

In every institutional type except the Elite Liberal Arts College group, satisfaction with administration tended to be at least twice as influential as any other factor in its effect on institutional identification.

The component of the General Satisfaction Score which was second most important in determining institutional identification was the feeling of being more important in departmental decision making than the average faculty member. This factor was closely followed by the feelings of being more influential than the average faculty member in school, college, and institution-wide decision making. The institutions which did not fit this pattern were the Elite Liberal Arts College, the Public Comprehensive, and the Public College institutional types. It is interesting to note that in the broader spheres of influence, the faculty member's feeling of being influential had a smaller effect on institutional identification.

Satisfaction with salary tended not to have much influence on institutional identification, though it was somewhat more important than most other factors in the Elite Liberal Arts College and the Public College institutional types. The feeling that the institution's students were competent had almost no impact in institutions other than those in the Public Comprehensive and the Public College groups. The feelings that colleagues were competent and that offices were satisfactory had a uniformly low influence on institutional identification. No particular pattern for the influence of the appraisal of the evaluation processes or work load appeared. Their impact was generally very slight.

PATH COEFFICIENTS AND CORRELATIONS
BETWEEN THE COMPONENTS OF THE GENERAL SATISFACTION SCORE
AND INSTITUTIONAL IDENTIFICATION

(correlations are in parentheses)

COMPONENT	INSTITUTIONAL TYPE							
	All Inst.	Pvt.Multi	Pub.Multi	Elite L.A.	Pub.Comp.	Pub.Coll.	Pvt.L.A.	Comm.Coll.
Teaching Load and Weighting in Evaluation Process are OK	.0649 (.1378)	.1315 (.2079)	.0313 (.1026)	- (.1202)	.0564 (.1240)	.1194 (.1779)	- (.1604)	.0962 (.1634)
Office Facility is Adequate	.0215 (.1235)	- (.1558)	.0727 (.1493)	- (.1012)	- (.0936)	- (.1287)	- (.1725)	- (.1119)
Colleagues are Competent	.0761 (.1767)	.0889 (.2234)	.0549 (.1738)	.0853 (.1739)	.0771 (.1943)	- (.1910)	- (.1482)	.0824 (.1307)
Students are Competent	- (.1392)	.0569 (.2021)	- (.1305)	- (.1403)	.1026 (.2246)	.1167 (.2604)	- (.2008)	- (.0842)
Salary is Reasonable in light of My Qualifications and Experience	.0566 (.1743)	.0638 (.2525)	- (.1501)	.1248 (.2691)	- (.0856)	.1361 (.2163)	.0876 (.2410)	.0752 (.1385)
I am Relatively Influential in my Department	.0940 (.1940)	.1761 (.2445)	.1089 (.2076)	.1189 (.2264)	.0625 (.1690)	- (.1723)	.1004 (.1944)	.1110 (.1615)
I am Relatively Influential in my College/School	.0786 (.2352)	.0687 (.2920)	.0507 (.2104)	N/A	.1033 (.2351)	N/A	N/A	N/A
I am relatively Influential in my Institution	.0686 (.2289)	.0617 (.2868)	.0901 (.2347)	.2328 (.3199)	- (.2119)	.1073 (.1990)	.0934 (.2314)	.0587 (.1560)
Favorable Impression of Administration	.2501 (.3419)	.2706 (.4148)	.3078 (.3674)	.1214 (.2536)	.2577 (.3427)	.2173 (.3330)	.2883 (.2314)	.1971 (.2775)

6.3 Participation in Governance

Participation in Governance is a composite score of the coded responses indicating the number of departmental, college, and institutional committees a person serves on, the percentage of time spent in committee work, and the person's self-description as a policy maker. The mean scores for participation in governance broken down by institutional type did not form any apparent pattern.

The effect of participation in governance on the General Satisfaction Score was consistently strong and positive, and generally second in importance only to Senior Faculty Status. In the Private Multiversity group it had the largest total effect on the General Satisfaction Score. Though faculty and administrators may often be heard to grumble over the number of committee meetings they have to attend, participation in governance clearly has a strong effect on the perceptions which are grouped to form the General Satisfaction Score. The analysis of which perceptions are affected most remains to be done, but correlation analysis suggests that the perceptions most affected might be the feelings of being influential, particularly at the college level. Perceptions of the administration may also be affected by participation in governance, though the degree to which they are positive or negative probably depends on highly individual circumstances.

The effect of Participation in Governance on institutional identification should be significant, according to Salancik's findings (1979) in his studies of other occupational groups. Correlation analysis of the two variables would seem to support Salancik, with a .2425 correlation coefficient between them for the entire faculty population, and correlations for specific institutional types ranging from .2031 (Public Multiversity) to .3324 (Elite Liberal Arts College). Path analysis, however, showed that variance in Participation in Governance actually had very little effect on institutional identification. In the Public Multiversity, Public Comprehensive, Public College, and Private Liberal Arts groups, participation had no significant direct effect on institutional identification, and only small indirect effects ranging from .0487 (Public Comprehensive) to .1151 (Public College). Of the remaining institutional types, Participation in Governance in the Private Multiversity group actually had a slight negative direct effect (-.0482), though the positive indirect effects brought the total effect up to .1430. The most substantial total effects of Participation in Governance on institutional identification were in the Community College (.2516) and Elite Liberal Arts (.1659) groups. All indirect influence of Participation in Governance in the present study is through the General Satisfaction Score.

6.4 Cosmopolitan Factors

The Cosmopolitan score for each individual was the sum of the coded responses indicating the proportion of time the person spent on research, the number of books and the number of articles he or she had published in the preceding five years, the highest degree earned, and the amount of weight given to research activities in the respondent's evaluation. For the sake of convenience, the score was further recoded as a scale of 1 (least cosmopolitan) to 9 (most cosmopolitan) in the present analysis. The Cosmopolitan score was one of those factors which behaved in a very orderly manner, its mean score declining for each institutional type from Private Multiversity (6.663) to Private Junior College (1.973), except for a .013 increase between the Public Comprehensive and the Public College groups.

Alvin Gouldner (1958) suggested that the allegiance which cosmopolitan individuals have to their professions may lessen their institutional identification, and his theory was strongly supported by previous correlational studies which have used the data of the Stanford Project on Academic Governance. It is sufficient to state here that the Cosmopolitan Score had a low negative correlation with institutional identification in every institutional type. It had slight negative effects on satisfaction and institutional identification wherever significant paths existed, except for the Private Multiversity group, in which there was a slight (.1245) positive direct effect on the General Satisfaction Score.

6.5 Faculty Power in the Institution

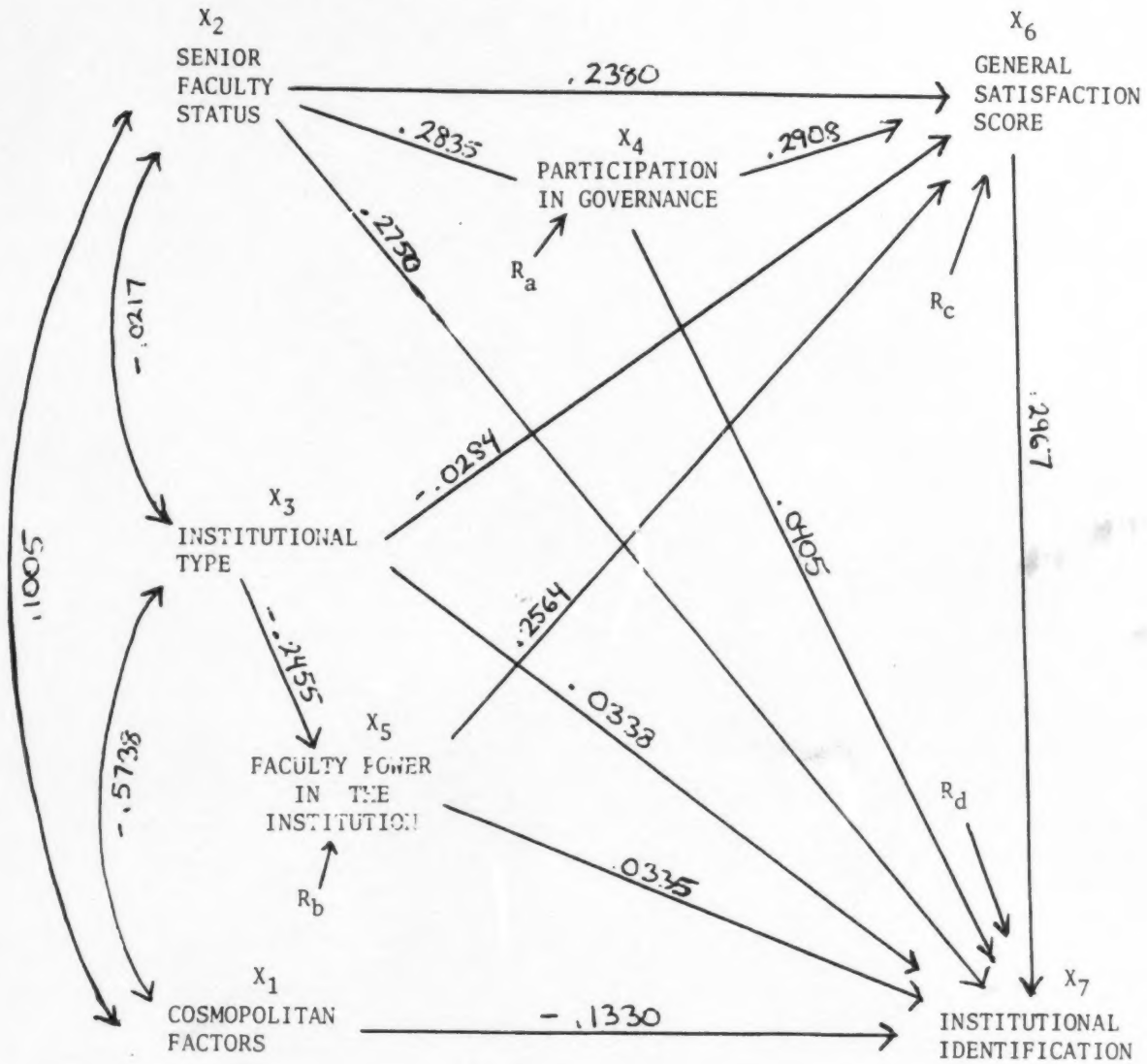
Faculty Power in the Institution is a composite measure, the sum of the scores measuring faculty influence in six institutional decision-making areas. The mean score for each of the institutional types tends to decrease toward the Private Junior College end of the institutional spectrum, though higher scores in the Community College and the Public College groups buck the trend. The effect of Faculty Power in the Institution on the General Satisfaction Score generally increases with the institutional type from .2420 (Private Multiversity) to .4351 (Community College), but the Elite Liberal Arts College group interrupts the pattern with the smallest total effect, .0924. In five of the seven institutional types analyzed, Faculty Power in the Institution had no direct effect on institutional identification, and only small indirect effects.

7. IMPLICATIONS OF THE FINDINGS

Because of the substantial differences among the types of higher educational institutions, as well as the differences among individual institutions, generalized implications of the findings of this study may be of little benefit. Examination of the path diagrams for a particular institutional type, however, can give selection committees, department chairs, and other administrators a sense of the relative impact of some major influences on a broad measure of satisfaction and on the institutional identification of personnel.

The responses to the institutional identification question were recoded to break down the population into only two groups: those who prefer to remain where they are and those who would leave for a better job - or even an equivalent position - elsewhere. Since the entire population was approximately evenly split in this dichotomy, and behavior generally follows behavioral intentions, it behooves administrative personnel to pay attention to the factors with the greatest impact on a faculty member's general satisfaction and on his or her institutional identification. The findings of this study can give statistical support, for instance, to the hunches of a department chair in an institution which is not particularly prestigious that a prospective member of the faculty whose glamorous publishing record is desired to add lustre to the department's reputation may be hard to keep if the job market is not a tight one. Once hired, the cosmopolitan professional will need to be encouraged to become a permanent fixture, and the chair may need to bear in mind what factors are most conducive to a faculty member's satisfaction. While the newcomer cannot be given a full professorship, tenure, and instant "old hand" status, there are other ways to support and encourage the development and retention of the individual. Evaluation and reward systems, as well as procedures in assigning responsibilities to personnel, must take into account individual interests and needs, but should be created with as broad an awareness as possible of the causes and effects of the various factors considered in the present study. It is hoped that this paper will be of some assistance.

PATH DIAGRAM - ALL INSTITUTIONS



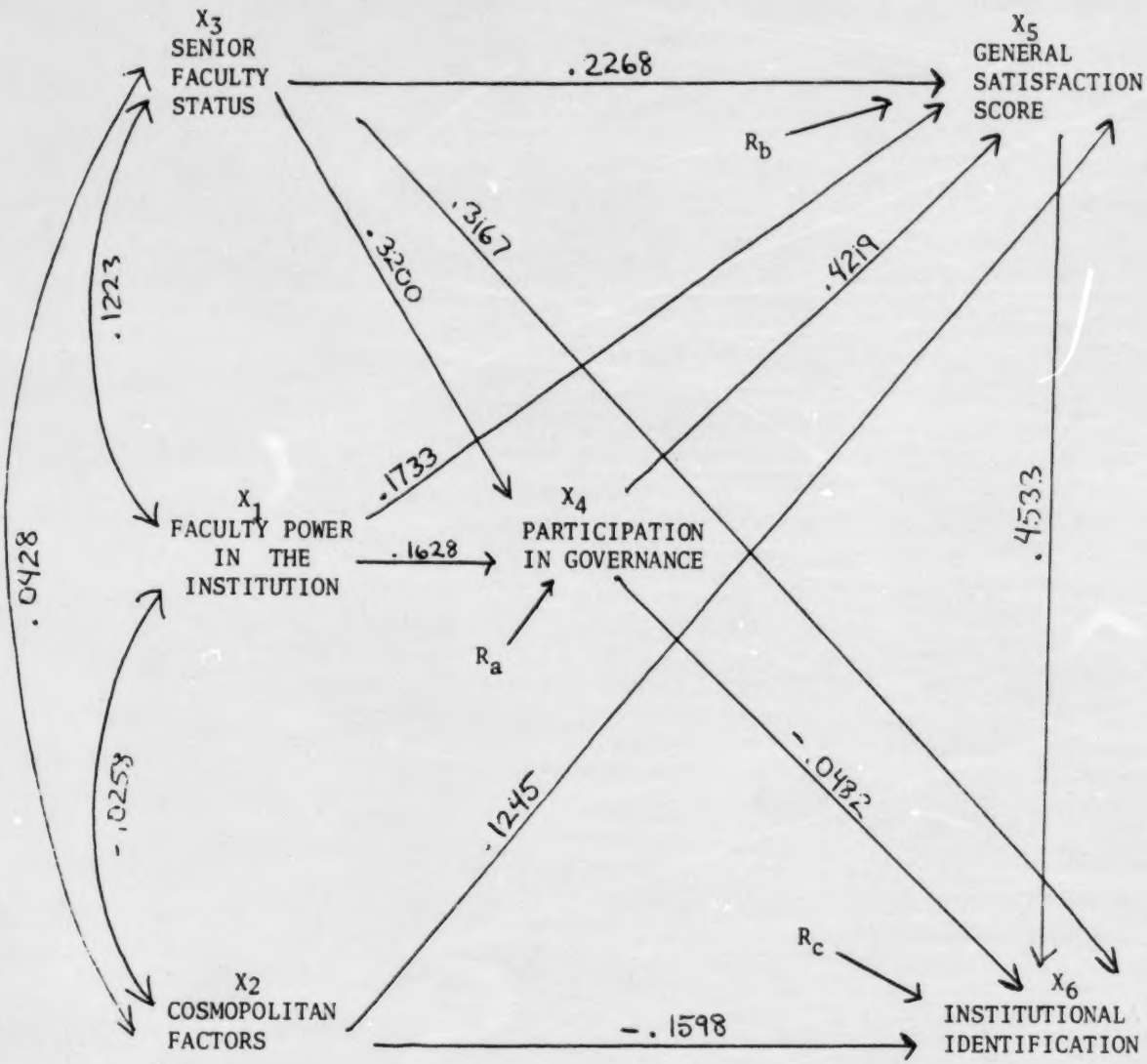
Residual Path Coefficients:

R_a = .9694
R_b = .9471
R_c = .8392
R_d = .8395

X_1						
X_2	.1005					
X_3	-.5738	-.0217				
X_4	.0072	.2835	.0802			
X_5	.2074	.1169	-.2455	.1513		
X_6	.0966	.3510	-.0732	.3948	.3352	
X_7	-.0889	.3805	.0775	.2425	.1354	.4052
	X_1	X_2	X_3	X_4	X_5	X_6

CORRELATION MATRIX - ALL INSTITUTIONS

PATH DIAGRAM - PRIVATE MULTIVERSITY



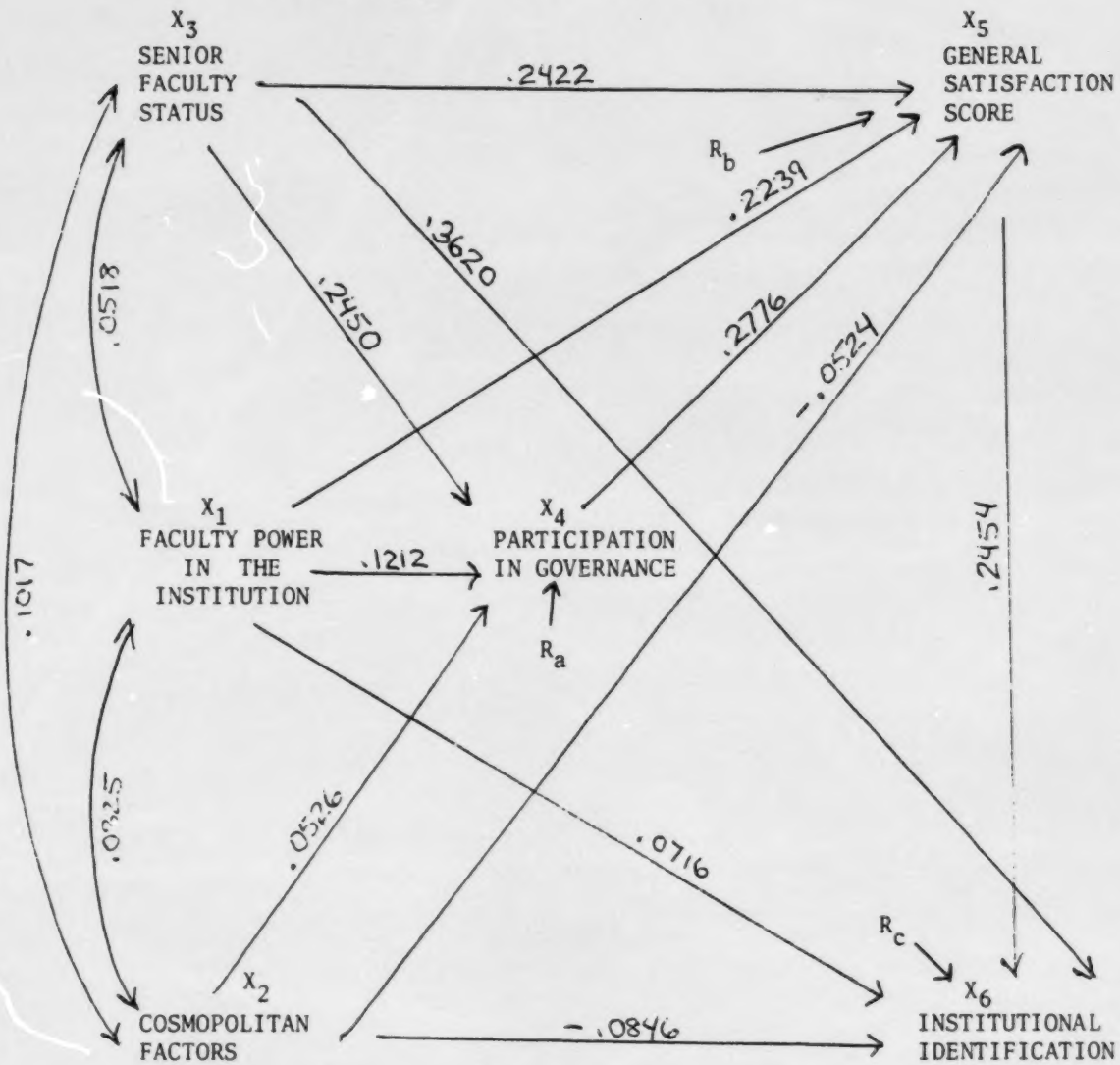
Residual Path Coefficients

R_a = .9254
R_b = .7878
R_c = .7799

X_1					
X_2	-.0258				
X_3	.1223	.0428			
X_4	.2069	-.0187	.3405		
X_5	.2851	.1218	.3970	.5327	
X_6	.1350	-.0901	.4734	.3041	.5339
	X_1	X_2	X_3	X_4	X_5

CORRELATION MATRIX - PRIVATE MULTIVERSITY

PATH DIAGRAM - PUBLIC MULTIVERSITY



Residual Path Coefficients

R_a = .9573

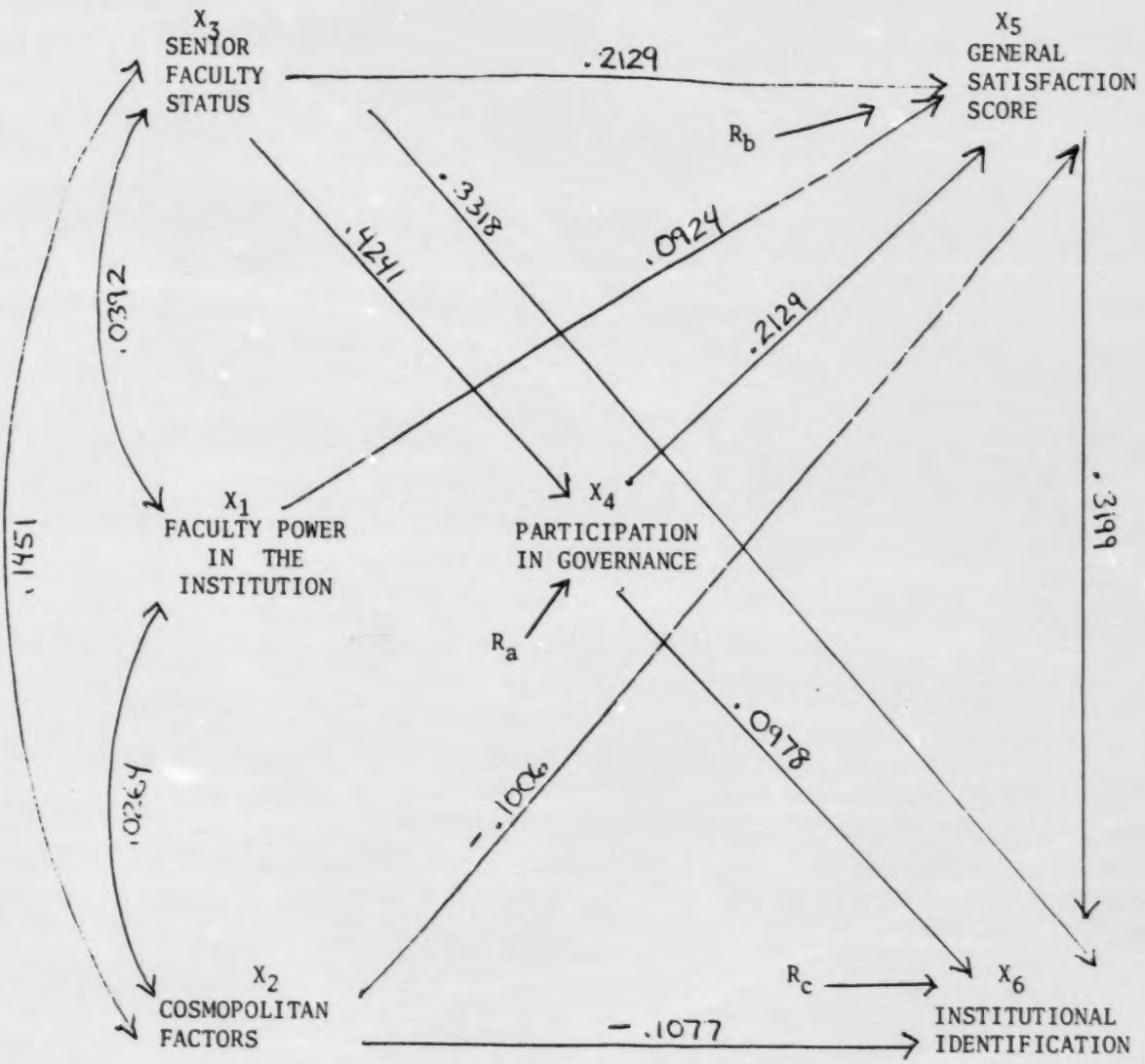
R_b = .8719

R_c = .8568

	X_1	X_2	X_3	X_4	X_5
X_1					
X_2	.0325				
X_3	.0518	.1017			
X_4	.1356	.0815	.2566		
X_5	.2724	.0021	.3197	.3658	
X_6	.1545	-.0449	.4356	.2031	.3805

CORRELATION MATRIX - PUBLIC MULTIVERSITY

PATH DIAGRAM - ELITE LIBERAL ARTS COLLEGE



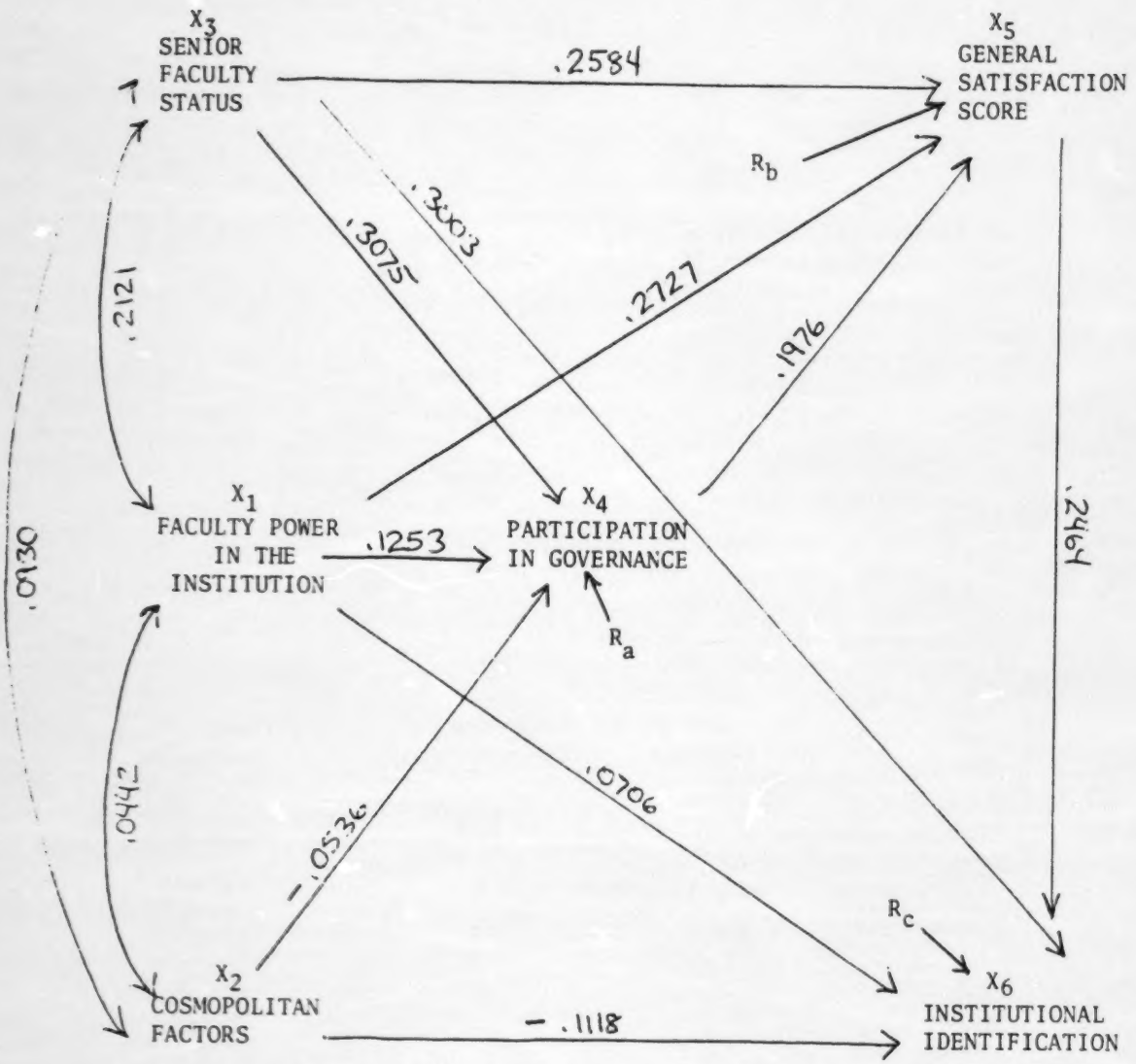
Residual Path Coefficients

R_a = .9056
R_b = .9251
R_c = .8154

X_1					
X_2	.0264				
X_3	.0392	.1451			
X_4	.0853	.0400	.4241		
X_5	.1162	-.0588	.2922	.3070	
X_6	.0804	-.0745	.4511	.3324	.4532
	X_1	X_2	X_3	X_4	X_5

CORRELATION MATRIX - ELITE LIBERAL ARTS COLLEGE

PATH DIAGRAM - PUBLIC COMPREHENSIVE



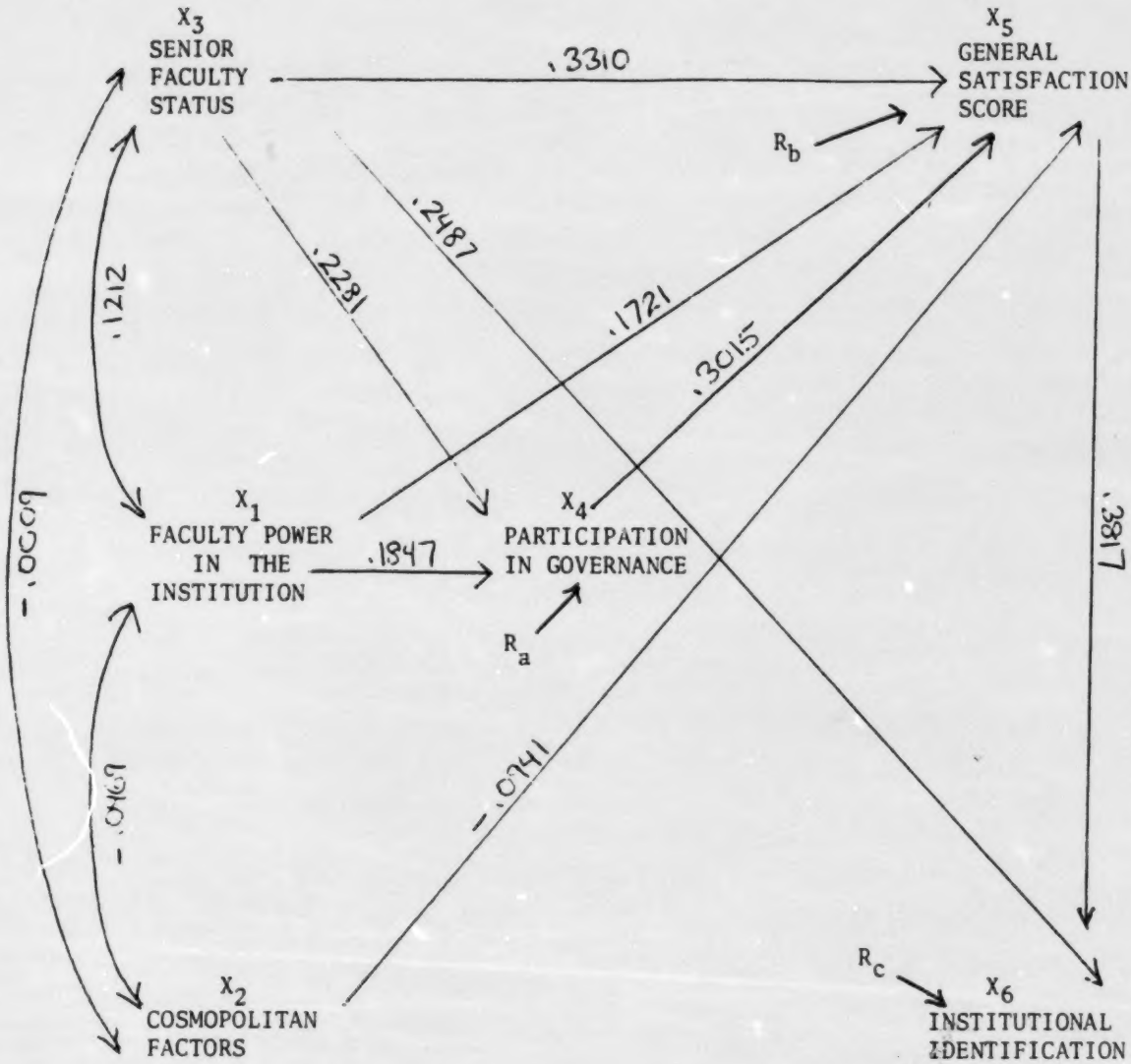
Residual Path Coefficients

R_a = .9350
R_b = .8579
R_c = .8728

X_1					
X_2	.0442				
X_3	.2121	.0930			
X_4	.1882	-.0195	.3291		
X_5	.3647	.0229	.3813	.3340	
X_6	.2192	-.0751	.3988	.2198	.3841
	X_1	X_2	X_3	X_4	X_5

CORRELATION MATRIX - PUBLIC COMPREHENSIVE

PATH DIAGRAM - PUBLIC COLLEGE



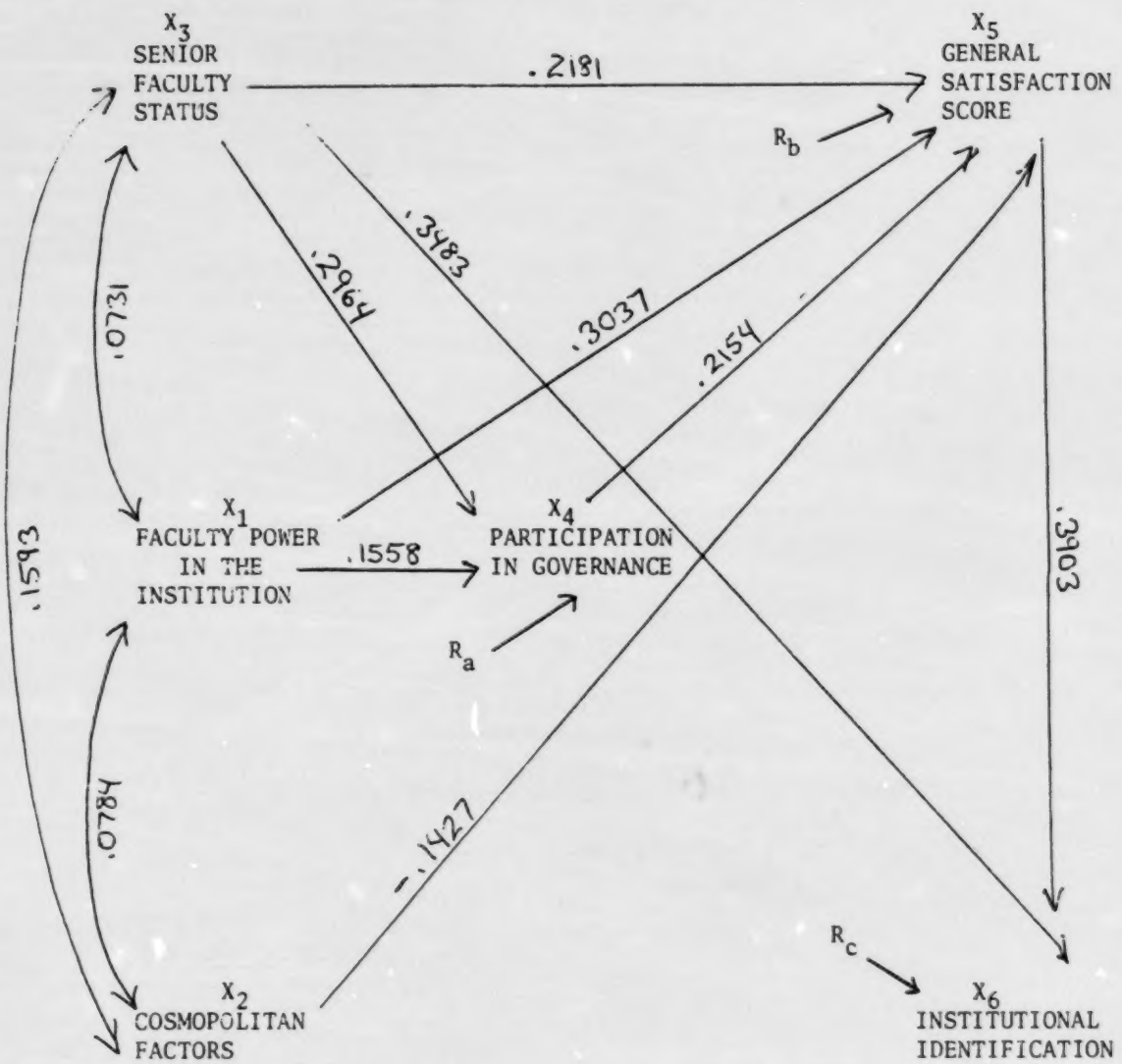
Residual Path Coefficients

R_a = .9506
R_b = .8210
R_c = .8434

X_1					
X_2	-.0469				
X_3	.1212	-.0009			
X_4	.2123	.0079	.2505		
X_5	.2806	-.1001	.4275	.4202	
X_6	.1811	-.0876	.4119	.2141	.4880
	X_1	X_2	X_3	X_4	X_5

CORRELATION MATRIX - PUBLIC COLLEGE

PATH DIAGRAM - PRIVATE LIBERAL ARTS COLLEGE



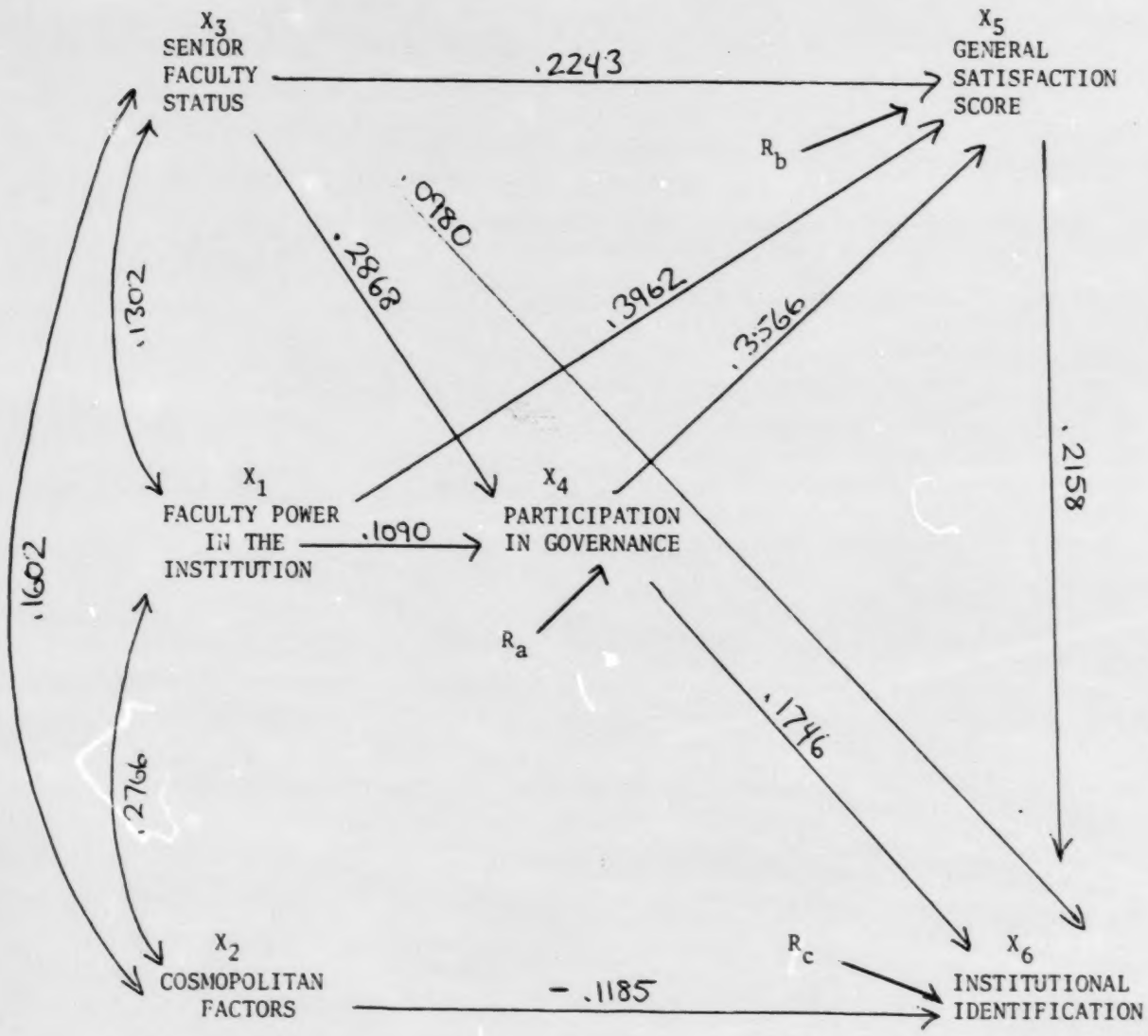
Residual Path Coefficients

R_a = .9387
R_b = .8673
R_c = .8057

X_1					
X_2	.0784				
X_3	.0731	.1593			
X_4	.1775	.0639	.3078		
X_5	.3467	-.0704	.2839	.3273	
X_6	.1334	-.0328	.4591	.2318	.4892
	X_1	X_2	X_3	X_4	X_5

CORRELATION MATRIX - PRIVATE LIBERAL ARTS COLLEGE

PATH DIAGRAM - COMMUNITY COLLEGE



Residual Path Coefficients

R_a = .9475
R_b = .7436
R_c = .9248

X_1					
X_2	.2766				
X_3	.1302	.1602			
X_4	.1463	.1127	.3010		
X_5	.4776	.2053	.3832	.4821	
X_6	.1344	-.0388	.2143	.2948	.3132
	X_1	X_2	X_3	X_4	X_5

CORRELATION MATRIX - COMMUNITY COLLEGE